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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,498	03/29/2001	Franco Iacobelli	NSC-P04896	6550

7590

02/09/2004

WAGNER, MURABITO & HAO LLP
Third Floor
Two North Market Street
San Jose, CA 95113

EXAMINER

LEE, MICHAEL

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 02/09/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary

Application No.

09/823,498

Applicant(s)

IACOBELLI ET AL.

Examiner

M. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7, 8, 11-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 7, 8, 25, and 26, the term "said window" lacks proper antecedent basis.

In claim 11, page 38, line 5, "said source device" lack proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-9, 11-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Swanson et al. (4,496,976).

Regarding claim 1, Swanson discloses a reduced memory graphic to raster scan converter showing a TV monitor for displaying a video signal in a first format on a line to line basis, which meets the displaying step as claimed, a digital input/output device 24 for receiving graphic data, having different format from the first format, in accordance with the control signals issued by a controller 20, which meets the requesting step as

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claimed, a write data/address signal generated by graphics generator 26 to memory 30 for storing graphics data into memory 30, which meets the receiving step as claimed, a read data/address signal 18 to memory 30 for synchronizing the graphic data with the composite video signal, which meets the aligning step as claimed, a multiplexer 32 for mixing the graphic signal and the composite video signal together, which meets the mixing step as claimed, and the TV monitor for displaying the combined composite video signal and graphic signal on the screen without any interruption or distortion (col. 7, lines 15-19), which meets the displaying step as claimed.

Regarding claim 2, each line of the graphics data is being combined concurrently with the composite video lines, which meets the requesting step as claimed.

Regarding claim 3, the sync counter 16 in Swanson for providing a synchronization signal to computer 28 and read data/address generator 18 for synchronizing the composite video signal with the graphic signal, which meets the sending step as claimed. It should be noted the horizontal and vertical sync components in Swanson are essentially the same as the retrace signal as claimed and the television signals can be either a progressive mode or interlaced mode (col. 3, lines 50-55).

Regarding claim 4, the mixing signals in Swanson are video signal and graphic signal. The graphic signal is inherently present in a window manner, which the size can be configured by the user (see col. 3, lines 36-56).

Regarding claim 6, the data in memory 30 in Swanson is read out at a field rate matches to that of composite video signal, which meets the matching step as claimed, and the character/graphics generator 26 for converting data words into video display

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signals (note col. 4, lines 3-11), which meets the converting step as claimed. It should be noted that the graphics data stored into the memory 30 is at a different rate than when it being read out.

Regarding claim 7, the multiplexer 32 inherently includes the overlaying and placing steps as claimed because it is intended to superimpose a graphics over a video signal.

Regarding claim 8, in addition to claim 7, the multiplexer 32 also carries out an alpha blending operation in accordance with the control of read data/address generator 18. The alpha value in the invention is either 0 or 1.

Regarding claim 9, since the frame in Swanson is made up of an even field and an odd field, the frame rate is equal to half of the field rate. Conversely, the conversion of field rate as stated in rejection to claim 6 could be considered as frame rate conversion. Therefore, the performing step is met by Swanson.

Regarding claims 11, 12, 13, 15, 16, 17, in addition of above reasoning, Swanson further inherently includes the repeating steps as claimed because the image is being generated in a line-by-line and field-by-field or frame-by-frame manner.

Regarding claim 18, see col. 1, lines 11-22.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 10, 14, 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanson et al. (4,496,976).

Regarding claims 5, 14, Swanson does not specify that the first media data type comprises graphics data and the second media data type comprises video data. It is understood that the composite video signal in Swanson can be replaced with graphics data while the memory 30 can be used to store video signals. It is considered a matter of design choice. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to replace the composite video signal with graphics data and graphics data with video signal to perform the well known function as claim. The size of the video window is controlled by the controller 20.

Regarding claim 10, Swanson does not specify the FIFO memory as claimed. Instead, a conventional RAM is being employed. It is well known that FIFO memories have operating speed advantage over RAM memories. They are generally being used in the video display environment where speed is a critical factor. Hence, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to replace the RAM in Swanson with a FIFO memory so that operating speed of the system can be improved.

Regarding claims 19-28, in addition of all above reasoning, Swanson does not specify the processor and a memory for storing instructions for carrying out the invention as claimed. In any event, it is well known in the art that computers can be

programmed to perform different tasks. Utilizing of computers can reduce the cost of product and increase the operation accuracy of a system. Computer implementations are usually carried out either by hardware or software. The former has the advantage of speed while the latter has the advantage of flexibility. In view of these, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement Swanson's invention on a conventional computer system to perform the well known functions as claimed.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Skerlos et al. (4,633,297) shows a mixer 54.

Siann et al. (5,406,306) shows a graphics and video mixing system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Lee whose telephone number is **703-305-4743**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John Miller**, can be reached at **703-305-4795**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, consisting of a large, stylized 'L' shape with a horizontal stroke extending to the right.

**M. Lee
Primary Examiner
Art Unit 2614**

February 6, 2004